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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,238	08/31/2001	Shrjie Tzeng	023925-00014	1315

32294 7590 11/13/2006

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EXAMINER	
MOORE JR, MICHAEL J	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/943,238	TZENG, SHRJIE	
	Examiner	Art Unit	
	Michael J. Moore, Jr.	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-10 and 16-23* is/are allowed.

6)☒ Claim(s) *11-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **11-15** are rejected under 35 U.S.C. 102(e) as being anticipated by Wong et al. (U.S. 6,754,216) ("Wong"). *Wong* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **11**, "designating a first plurality of ports of a first switch by a first numbering scheme" is anticipated by buffers 0-8 (ports with first numbering scheme) of fabric access devices (FAD) 414, 416, and 418 of Figure 4 that are part of the switch fabric 300 (first switch) of Figure 3.

"Designating a second plurality of ports of a second switch by a second numbering scheme" is anticipated by port interface devices 0-7 (ports with second numbering scheme) of port interface device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452 of Figure 4 that are part of the Ethernet switch system 350 (second switch) of Figure 3.

"Coupling a first link port of the first plurality of ports to a second link port of the second plurality of ports" is anticipated by buffers 0-8 (first plurality of ports) of fabric

access devices (FAD) 414, 416, and 418 that are coupled to port interface devices 0-7 (second plurality of ports) of port interface device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452 via TAP multiplexers 426, 428, 430, 432, 434, and 436 as shown in Figure 4.

"Configuring the first switch to generate a first rate control message at the first switch and relay the first rate control message to a first local communications channel of the first switch" is anticipated by SWIP controller 305 of switch fabric 300 (first switch) of Figure 3 that monitors the congestion of the port interface devices and transmits a congestion rating (first rate control message) to the port interface devices as spoken of on column 16, lines 37-50.

"Configuring the first switch to perform a rate control function related to the second switch based on the first rate control message" is anticipated by SWIP controller 800 of Figure 8 containing congestion control module 840 that controls transmissions (rate control function) in light of detected congestion conditions (based on the first rate control message) as spoken of on column 15, lines 18-34.

Lastly, "wherein each of the first plurality of ports and the second plurality of ports is configured to perform switching and rate control functions" is anticipated by buffers 0-8 (first plurality of ports) of fabric access devices (FAD) 414, 416, 418 as well as port interface devices 0-7 (second plurality of ports) of port interface device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452 that are configured to transmit and receive data (switching and rate control) controlled by SWIP controller 404 within the

switch fabric of Figure 4 as spoken of on column 15, lines 18-34 as well as column 16, lines 48-55.

Regarding claim **12**, "generating the first rate control message including data relating to the first link port being congested" is anticipated by the congestion rating (first rate control message) transmitted by a SWIP controller indicating the congestion status of port interface devices (PIDs) as spoken of on column 16, lines 46-55.

Lastly, "configuring the first switch to perform a rate control function including preventing data packets from being sent to the second switch" is anticipated by SWIP controller 800 of Figure 8 containing congestion control module 840 that controls transmissions (rate control function) in light of detected congestion conditions (first rate control message) as spoken of on column 15, lines 18-34, as well as column 16, lines 50-55 that states that each PID uses the congestion rating to determine whether to transmit or discard data (prevent packets from being sent) intended for a recipient OctaPID.

Regarding claim **13**, "generating the first rate control message comprising a HOL status notification relating to the first link port being congested" is anticipated by the congestion rating (HOL status notification) transmitted by a SWIP controller indicating the congestion status of port interface devices (PIDs) as spoken of on column 16, lines 46-55.

Lastly, "configuring the first switch to perform a rate control function including a rate control function relating to a HOL status notification relating to all of the second group of ports based on the first rate control message" is anticipated by SWIP controller

800 of Figure 8 containing congestion control module 840 that controls transmissions (rate control function) in light of detected congestion conditions (first rate control message) as spoken of on column 15, lines 18-34.

Regarding claim **14**, "configuring the first group of ports to drop all packets destined for the second switch when the first rate control message includes data relating to the first link port being congested" is anticipated by lines 50-55 that states that each PID uses the congestion rating to determine whether to transmit or discard data (prevent packets from being sent) intended for a recipient OctaPID.

Regarding claim **15**, "configuring the first group of ports to drop all packets destined for the second switch when the first rate control message comprises a HOL status notification related to the first link port" is anticipated by lines 50-55 that states that each PID uses the congestion rating to determine whether to transmit or discard data (prevent packets from being sent) intended for a recipient OctaPID.

Allowable Subject Matter

3. Claims **1-10 and 16-23** are allowable over the prior art of record.

4. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims **1-10 and 16-23**, these claims are allowable for the reasons indicated in the previous Office Action mailed 7/27/05.

Response to Arguments

5. Applicant's arguments regarding claims **11-15** filed 8/25/06 have been fully considered but they are not persuasive.

Regarding claim **11**, Applicant argues that there is no teaching or suggestion in *Wong* that the buffers 0-8 of fabric access devices (FAD) 414, 416, and 418 are configured to perform switching and rate control functions. Applicant further argues that simply because a buffer is part of a switch does not mean that the buffer is automatically configured to perform switching and rate control functions.

However, these FAD buffers are a part of the switch fabric of Figure 4 and they are involved in the transmission and reception of data as well as congestion control information between SWIP controller 404 and port interface device (OCTOPID) groups 440, 442, 444, 446, 448, 450, and 452.

As Applicant noted, *Wong* discloses that each of the fabric access devices (FAD) 414, 416, and 418 includes a multiplexer 420, 422, 424 used to select a specific buffer that is to transmit or receive data. It is further stated on column 15, lines 18-34, how the SWIP controller receives buffer status information from the FAD buffers and determines which FAD buffers should have their contents transmitted. It is held that this constitutes a "switching function" as data is switched through a specific buffer.

Wong also discloses on column 16, lines 48-55, how the SWIP controller transmits a congestion rating to all port interface devices such that a determination can be made whether to transmit or discard data. As shown in Figure 4, SWIP controller communicates with port interface device (OCTOPID) groups via fabric access devices (FAD) 414, 416, 418 and TAP MUX devices 426-436. Therefore, it is held that the FAD buffers perform a "rate control function" of transmitting a congestion rating (regulates

network congestion and packet dropping) from SWIP controller 404 to port interface device (OCTOPID) groups 440-452.

Therefore, it is held that *Wong* anticipates claim **11**.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:00am - 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Moore, Jr.
Examiner
Art Unit 2616

mjm MM

Seema S. Rao 11/9/06
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